

# TREE/SHRUB PRUNING

(Acre)  
Code 660

Natural Resources Conservation Service  
Conservation Practice Standard

## I. Definition

Removing all or parts of selected branches or leaders from trees and shrubs.

## II. Purposes

This practice may be applied as part of a resource management system to support one or more of the following purposes:

- Improve the appearance of trees or shrubs, e.g., ornamental plants and Christmas trees.
- Improve the quality of wood products.
- Improve the production of plant products, e.g., nuts, fruits, boughs and tips.
- Reduce fire and/or safety hazards.
- Improve the growth and vigor of understory plants.
- Adjust the foliage and branching density for other specific intents, such as wind and snow control, noise abatement, access control, and visual screens.

## III. Conditions Where Practice Applies

This Practice Applies:

- In areas where trees are grown and the quality of the final product and the potential of the site justify the cost.
- Where removing all or parts of branches enhances the beauty of an area.
- On Christmas tree plantations where removing all or parts of branches increases the value of the trees.
- On any other area trees and shrubs are grown where pruning is beneficial.

## IV. Federal, State, and Local Laws

Users of this standard should be aware of potentially applicable federal, state and local laws, rules, regulations or permit requirements governing

tree/shrub pruning. This standard does not contain the text of federal, state, or local laws.

## V. Criteria

### A. General Criteria Applicable to All Purposes

1. The pruning and shearing method and timing will match the limitations of the site and soils, achieve purposes for the specific tree or shrub species, and be conducted in a safe and efficient manner.
2. Pruning or shearing will not adversely reduce the growth and vigor of the tree or shrub for the intended purpose.
3. Debris and vegetative material left on the site after treatment will not present an unacceptable fire or pest hazard or interfere with the intended purpose and other management activities.

### B. Pruning Criteria to Produce Clear Logs

#### 1. Pine Plantations

The native pines, (red pine, eastern white pine and jack pine,) prune themselves poorly in plantations. While it is best to follow advice of professional foresters in pruning operations in pine, the following rules generally apply to Wisconsin conditions:

- a. Soil Site - Limit pruning to plantations on soils with a Site Index of 55 or more. See NRCS Soil Interpretation Record or soil survey for Site Index values.
- b. Age - First pruning should be done following the first thinning, which will vary with site and species from age 20 to 40 years. Some references suggest pruning all trees to 6 feet height for easy access and fire prevention.
- c. Trees to Prune - Select from 60 to 150 crop trees per acre. Confine crop trees

pruned to alternate rows or every third row that will not be cut during future thinning operations.

- d. Height to Prune - Prune to a 17 foot height to provide a clear 16 foot butt log. This height may be reached in one or more prunings depending on the height to the live crown of the trees.
- e. Amount of Live Crown to Remove - Remove no more than one-third of the live crown in a single operation.
- f. Time of Year - Pine trees can be pruned at any time during the year. However, fall and winter pruning is generally better, as it reduces danger of insect and disease damage. Summer-pruned limbs larger than 2 inches may harbor bark beetles.
- g. Border - Leave an unpruned border around the edge of plantations for wind protection and wildlife benefit.

## 2. Black Walnut Plantations

Black Walnut Plantations are pruned to produce single, straight stems.

- a. Age - Begin pruning when walnut trees are 2 years old.
- b. Method - Prune to encourage a dominant leader, a single, straight terminal of maximum length. Eliminate crotches.
- c. Cuts - Make cuts flush and as small as possible to hasten healing.
- d. Time of Year - The dormant season of November to April is preferred to avoid insect and disease hazards.
- e. Badly Deformed Trees - Cut back to the ground and start over.

## 3. Natural Stands of Black Walnut

The approach to pruning natural stands of black walnut varies with age, size, soil site, and condition of trees. The objective is to get as much clear length, especially of the butt log, as possible.

- a. Prune as early as possible to reduce size of wounds.
- b. Make cut flush with trunk for rapid healing.
- c. Remove limbs when they are 2 inches in diameter or less. Wounds from limbs larger than 2 inches seldom heal properly.
- d. Prune during dormant season, November through April.
- e. Consult local foresters if in doubt and for further guidance.

## C. Pruning Criteria to Enhance Beauty or Improve Recreational Value

Pruning of woodland may be required to improve aesthetics or recreational value of an area. Examples include: creating vistas in scenic areas, opening hiking trails, picnic areas and other areas of concentrated use, and removal of safety hazards.

- 1. Method - Remove limbs flush with tree trunk, avoiding damage to trunk.
- 2. Time - Generally best to prune in dormant season, November through April.
- 3. Limb Size - Limit the size of live limbs removed to 2 inches diameter. Dead limbs of any size may be removed if they constitute a safety hazard.

## D. Pruning Criteria to Shape Christmas Trees

The pruning of Christmas trees, often called "sheering" or "shaping" is a highly specialized procedure. Local guidelines are normally well established by commercial growers. The following are general guidelines that should be reinforced by local experience.

- 1. Pines
  - a. Time - In early summer, June 15 to August 15, depending on location. Prune when growth is nearly completed and while shoots are still soft and succulent enough to set buds.
  - b. Age - Begin shearing when pines are three to four years old.
  - c. Method - First year, remove deformities and multiple shoots.

- (1) Cut back terminal shoot to 12 to 14 inches.
- (2) Cut back laterals of terminal whorl to five inches shorter than terminal.
- (3) Going around tree, cut back all laterals to conical shape.
- (4) Confine cuts to first year wood, if possible. If necessary to cut older wood, cut flush with side branch.
- (5) In subsequent years, follow the same method being careful to maintain a dominant terminal.
- (6) Remove bottom whorl to provide "handle."

## 2. Spruce and Fir

- a. Time - Spruce and fir can be sheared at any season, but dormant shearing is preferred because of cooler working conditions, fewer insects, better distribution of shearing workload, new spring growth covers the wound, and the resulting improved flow of nutrients to the remaining buds results in a more vigorous tree.
- b. Age - Begin shearing spruce and fir at age three to five years depending on size and growth rate.
- c. Method - Shear for conical shape and dense foliage. Cut back terminal to 8 to 12 inches with cut above a strong, live single bud that will become terminal. Avoid double buds that lead to crotch formation. Cut back laterals to conical shape. Remove lower limbs to form "handle." Follow the same procedure annually with emphasis on keeping a dominant terminal.

## VI. Considerations

Pruning and shearing should be timed to minimize disturbance to seasonal wildlife activities.

Pruning and shearing tools should be disinfected to prevent the spread of pathogens.

Review the estimated cost and projected economic benefits of the project before starting pruning or shearing activity

To maintain plant growth and sustain vigor, pruning and shearing may be done in two or more timed steps.

## VII. Plans and Specifications

Location on the conservation plan map and documentation in the conservation plan.

Documentation will include species of tree, purpose of pruning, timing of pruning, method of pruning, and number of trees per acre to be pruned.

Specifications for applying this practice shall be prepared for each site.

In lieu of a conservation plan, provide a location map and above documentation.

## VIII. Operation and Maintenance

Periodically inspect plant condition and take additional actions as necessary, e.g., additional pruning, pest management, nutrient management and forest stand improvement.